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| NEW YORK, NY 10019 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/598,268

Applicant(s)

NAKATA, TSUNEO

Examiner

MICHAEL FIALKOWSKI

Art Unit

2419

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2009.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-13 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 20 May 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date _____

DETAILED ACTION

This office action is in response to amendments filed on May 20, 2009. Claims 1-13 are pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over McHale et al (2001/0043568) in view of Chen et al (2003/0064730).

Re claim 1, McHale et al discloses a subscriber network (See Figure 1), comprising:

a subscriber information administration server (for example, communication server in Figure 1) that manages terminations for a plurality of circuits (controls incoming circuits in Figure 3 [0073]-[0076]), comprising a circuit administration table (for example, subscriber table, activity table, and line profile table in Figure 3 [0077] [0079]-[0081]) for retaining a many-versus-one correspondence between the plurality of circuits and a subscriber (plurality of circuits in Figure 3 and subscribers in Figure 1);

wherein the server dynamically updates said circuit administration table to reflect a new circuit request or a change in network state (for example, management interface accesses table and updates valid subscribers [0083]); and wherein the server updates said circuit administration table to reflect a resource allocation of each circuit (for example, maximum rate in Figure 19). McHale et al does not explicitly disclose wherein the subscribers are mobile subscribers. However, Chen et al teaches of a subscriber which uses mobile clients (See Figures 1 and 5A). It would have been obvious for one of ordinary skill in the art of resource allocation at the time of the invention to substitute the mobile clients of Chen et al into the network of McHale et al in order to provide a wireless environment within a subscriber.

Re claim 2, McHale et al modified by Chen et al discloses the network of claim 1 but does not explicitly disclose wherein the server determines a number of circuits that a subscriber can use when the subscriber issues a new circuit request or releases a circuit in use, based on a state of other circuits of the subscriber, wherein said state is obtained from said circuit administration table. However, Chen et al teaches of determining a number of circuits that a subscriber can use when the subscriber issues a new circuit request or releases a circuit in use, based on a state of other circuits of the subscriber (waits for connection request, checks the remaining resource amount and calculates QoS [0099]) (resources are reassigned to each mobile station after a new transmission request [0107]), wherein said state is obtained from said circuit administration table (for example, users in the same service class are accompanied with movement in a state where resources are reallocated [0109]). It would have been

obvious for one of ordinary skill in the art at the time of the invention to include a number of circuits the subscriber can use as taught by Chen et al in the modified network of McHale et al in order to provision subscriber services based on the subscriber network.

Re claim 3, note that McHale et al discloses the network wherein the server updates a state of a circuit in the circuit administration table when a fixed network disconnects the circuit (for example, after a period of inactivity, processor releases the connection for later subscriber sessions [0092]).

Re claim 4, McHale et al modified by Chen et al discloses the network of claim 1, but does not explicitly disclose including a means for changing a resource allocation priority degree of a circuit that is affected due to updating said circuit administration table. However, Chen et al teaches of a means (reassignment transmission rate calculation circuit [0083]) for changing a resource allocation priority degree (resource reassignment [0113]-[0114]) of a connection that is affected due to updating said circuit administration table (for example, it is possible to adjust the degree of fairness among the users of different service classes [0101]). It would have been obvious for one of ordinary skill in the art at the time of the invention to include a changing of priority for a resource as taught by Chen et al in the modified network of McHale et al in order to account for changing resources and connections within the network, such as a data and voice communication (McHale et al [0063]).

Re claim 5, note that McHale et al discloses the network wherein the server allocates each circuit by communication with a circuit-setting means (for example,

processor communicates with modems and uses profile information in profile table to program them [0094]).

Re claim 6, note that McHale et al discloses the network wherein the server allocates each circuit by communication with termination equipment (for example, processor communicates with modem 30 in computer 22 in Figure 1, and sends connection information [0088]).

Re claim 7, note that McHale et al discloses the network wherein the server updates the circuit administration table to reflect a service condition of the subscriber (for example, coefficients/parameters of the characteristics of the line [0171] and configuration parameters [0169]).

3. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over McHale et al in view of Becker Hof (2004/0034797) and Chen et al.

Re claim 8, McHale et al discloses a resource administration method for a subscriber network (See Figure 1), the method comprising:
retaining information (for example, subscriber table, activity table, and line profile table in Figure 3 [0077] [0079]-[0081]) of a one-versus-many correspondence between a subscriber and circuits (controls incoming circuits in Figure 3 [0073]-[0076]) in the plurality of circuits and reflecting a new circuit request or a change in a network state in a circuit administration table (for example, management interface accesses table and updates valid subscribers [0083]), thereby dynamically updating said circuit administration table; and

allocating each circuit in the plurality of circuits based upon said circuit administration table (for example, by a maximum rate in Figure 19). McHale does not explicitly disclose circuits with which said subscriber enters into a contract. However, Becker Hof teaches of subscribers entering contracts based on the circuits they use ([0064]). It would have been obvious to one of ordinary skill in the art at the time of then invention to include contracts for subscribers as taught by Becker Hof in the method of McHale in order to provide compensation for network services provided to subscribers. McHale modified by Becker Hof does not explicitly disclose a mobile subscriber network. However, Chen et al teaches of a subscriber which uses mobile clients (See Figures 1 and 5A). It would have been obvious for one of ordinary skill in the art of resource allocation at the time of the invention to substitute the mobile clients of Chen et al into the modified method of McHale et al in order to provide a wireless environment within a subscriber.

Re claim 9, McHale et al modified by Becker Hof and Chen et al discloses the method of claim 8, but does not explicitly disclose in the step of requesting a circuit setting by the subscriber, or in handing over a circuit in use, making a reference to a state of an other circuit of said subscriber obtained from the circuit administration table, thereby to compute a number of circuits in the plurality that said subscriber can use. However, Chen et al teaches of in the step of requesting a circuit setting by the subscriber, or in handing over a circuit in use, making a reference to a state of an other circuit of said subscriber (resources are reassigned to each mobile station after a new transmission request [0107]) obtained from the circuit administration table (for example,

users in the same service class are accompanied with movement in a state where resources are reallocated [0109]), thereby to compute a number of circuits in the plurality that said subscriber can use (waits for connection request, checks the remaining resource amount (and therefore the number of connections) and calculates QoS [0099]). It would have been obvious for one of ordinary skill in the art at the time of the invention to include a number of circuits the subscriber can use as taught by Chen et al in the modified network of McHale et al in order to provision subscriber services based on the subscriber network.

Re claim 10, note that McHale et al discloses the resource administration method characterized in including a step of updating a state of a circuit in said circuit administration table when disconnecting the circuit by a fixed network (for example, after a period of inactivity, processor releases the connection for later subscriber sessions [0092]).

Re claim 11, McHale et al modified by Becker Hof and Chen et al discloses the method of claim 8, but does not explicitly disclose including a step of changing a resource allocation priority degree of a circuit that is affected due to updating said circuit administration table. However, Chen et al teaches of changing (reassignment transmission rate calculation circuit [0083]) a resource allocation priority degree (resource reassignment [0113]-[0114]) of a connection that is affected due to updating said administration table (for example, it is possible to adjust the degree of fairness among the users of different service classes [0101]). It would have been obvious for one of ordinary skill in the art at the time of the invention to include a changing of priority for

a resource as taught by Chen et al in the modified method of McHale et al in order to account for changing resources and connections within the network, such as a data and voice communication (McHale et al [0063]).

Re claim 12, note that McHale et al discloses the resource administration method characterized in including a step of updating the circuit administration table to reflect resource allocation of each circuit based upon information from the subscriber network (for example, processor communicates with modem 30 in computer 22 in Figure 1, and sends connection information [0088]).

Re claim 13, note that McHale et al discloses the resource administration method characterized in including a step of updating the circuit administration table to reflect resource allocation of each circuit based upon information from a fixed network (for example, processor communicates with modems and uses profile information in profile table to program them [0094]) (for example, coefficients/parameters of the characteristics of the line [0171] and configuration parameters [0169]).

Response to Arguments

4. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL FIALKOWSKI whose telephone number is (571)270-5425. The examiner can normally be reached on Monday - Friday 10:30am-7pm EST .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Ryman can be reached on (571)272-3152. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. F./
Examiner, Art Unit 2419

/Daniel J. Ryman/
Supervisory Patent Examiner, Art Unit 2419